CONCEPT FOR USING SOFTWARE/ELECTRONICS TO CALIBRATE THE CONTROL SYSTEM FOR AN AUTOMATIC TRANSMISSION

ABSTRACT OF THE DISCLOSURE

A software calibration strategy for calibrating solenoid controlled valves and valve systems in an automatic transmission. The strategy includes identifying a characteristic equation for the valve or valve system that is a mathematical relationship between a current applied to the solenoid and the pressure at the output of the valve or valve system. The valve or valve system is coupled to a test stand that depicts the operation of the valve or valve system in the transmission. Current signals are applied to the valve or valve system, and the output pressures are measured to determine coefficients in the equation using a curve fitting function. The coefficients are then stored in a control unit.